

receiving an indication of an action to be taken, the indication being received at any arbitrary position within the area of the display at the given time, the indication being unambiguously associated with the node associated with the subarea that contains the arbitrary position.

C3 ~~12~~ 8. (twice amended) The method of claim ~~7~~ in which each of the levels is represented as a band of node representations in the area, nodes represented in one band have a parent-child relationship with nodes represented in an adjacent band, and, within a band representing one level, the area is divided so that the subarea allocated to a parent node in that one level has the same extent along the band as the sum of the extents of the subareas in the adjacent band representing another level that are allocated to the children of the parent node.

~~12~~ 12. (amended) The method of claim ~~1, 6, or 13~~ also comprising for a node in the hierarchy of nodes, rendering an outline and a representation of node-specific information, the outline having dimensions that change with an amount of space dynamically allocated to the node based on a changing focus in the hierarchy, the representation having unchanging dimensions,

drawing the outline and the representation on a display, and when the focus changes,

re-rendering the outline with updated dimensions, and without re-rendering, copying the rendered representation to a new location.

C4 ~~15~~ 12. (twice amended) The method of claim ~~1, 6, or 13~~ also comprising receiving information indicating current displacement of a user input device within a two-dimensional frame of reference from a zero position, and

translating the received information indicating the current displacement in at least one of the dimensions to a rate of change of position of a user's focus in a display of a portion of the hierarchy.

Sub  
Di

~~15~~ 15. (twice amended) A method comprising displaying a representation of a portion of a hierarchy of nodes to a user, enabling a user to navigate in the displayed representation of the portion of the hierarchy only by a first type of user-interface action performed only outside of the displayed representation of the portion of the hierarchy and allowing, only by a second type of user-

interface action only within the displayed representation of the portion of the hierarchy, the selection of any node in the portion of the hierarchy of nodes of which a representation is being displayed,

reporting each selection to an application to invoke node-specific behavior in the application, the node-specific behavior being other than affecting the representation of the hierarchy, and the application being other than the representation and navigation of the hierarchy.

~~19~~ 18. (twice amended) The method of claim 1, ~~6~~ or ~~15~~ also comprising displaying a representation of a portion of the hierarchy of nodes, providing a software emulation of a return-to-center input device for enabling a user to navigate the hierarchy, and

in response to the user manipulating a non-return-to-center input device to indicate an intended manipulation of the emulation for navigating the hierarchy, treating the user's manipulation as a manipulation of the return-to-center input device.

~~26~~ 27. (twice amended) The method of claim 1, ~~6~~ or ~~15~~ also comprising at a client device, displaying information about a portion of the hierarchy of nodes, the portion changing as a focus position changes,

fetching, from a server, as a result of no user interaction other than navigation, information about portions of the hierarchy that are approaching view, including information not previously fetched about descendant nodes of currently displayed nodes, and

representing each node as the displayed portion of the hierarchy changes to include the node.

~~28~~ 27. (twice amended) The method of claim 1, ~~6~~ or ~~15~~ also comprising receiving at a server a request from a client for information about the hierarchy, in response to the request, providing to the client information about only a portion but not all of the hierarchy, the portion including references to information about other portions of the hierarchy, and

determining the size of the portion to be provided to the client adaptively based on parameters for optimizing communication between the server and the client.

9 ~~32~~. (twice amended) The method of claim 1 or ~~6~~ also comprising an area that provides a navigational interface that permits continuous navigation, based on a user's continuous activation of a user interface device, of a hierarchy of nodes, the interface displaying information about a portion that is less than all of the hierarchy at one time, the portion changing apparently continuously in response to the user's continuous activation of the user interface device.

10 ~~33~~. (amended) The method of claim ~~32~~ in which the nodes comprise links to web pages.

Cancel claim 34 without prejudice

35 ~~35~~. (amended) The method of claims 1, ~~6~~, or ~~15~~ in which the nodes comprise links to web pages.

Cancel claims 36 and 37 without prejudice.

36 ~~38~~. (amended) The method of claim 1, ~~6~~, or ~~15~~ in which the hierarchy comprises a hierarchical function menu.

37 ~~39~~. (amended) The method of claim 1, ~~6~~, or ~~15~~ in which the hierarchy comprises a hierarchical file system.

38 ~~40~~. (amended) The method of claim 1, ~~6~~, or ~~15~~ in which the hierarchy comprises a document encoded in XML or an extension thereof.

39 ~~41~~. (amended) The method of claim 1, ~~6~~, or ~~15~~ in which the hierarchy comprises a hierarchical index constructed from a document, list, or table.

40 ~~42~~. (amended) The method of claim 1, ~~6~~, or ~~15~~ in which the hierarchy comprises an encoded hierarchy.

41 ~~43~~. (twice amended) The method of claim 1, ~~6~~, or ~~15~~ in which the hierarchy comprises the Dewey Decimal System.

42 ~~44~~. (amended) The method of claim 1, ~~6~~, or ~~15~~ in which the hierarchy comprises categorized products.

43 ~~45~~. (amended) The method of claim 1, ~~6~~, or ~~15~~ in which the hierarchy comprises postal addresses or other location by geographic region.

44 ~~46~~. (amended) The method of claim 1, ~~6~~, or ~~15~~ in which the hierarchy comprises characters belonging to a character set to be selected for text entry.

45/47. (amended) The method of claim 1, 6, or 15 in which the hierarchy comprises a corpus which is not hierarchical in its native form and upon which hierarchy has been imposed using a similarity-seeking technology.

46/48. (twice amended) The method of claim 1, 6, or 15 also comprising displaying a portion that is less than all of the hierarchy at a browser, enabling a user to navigate continuously through levels and nodes of the hierarchy based on a user's continuous activation of a user interface device, the portion that is displayed changing apparently continuously with the user's continuous activation of the user interface device, and

during navigation delivering portions of the hierarchy from a remote server to the browser in time to enable the continuous navigation.

Cancel claim 49 without prejudice.

32/33. The method of claim 27 in which the server includes hardware or software.

33/34. The method of claim 27 in which the server is remote from the client.

34/35. The method of claim 27 in which the server resides on a different machine, separated by a network, from the machine on which the client resides.

#### REMARKS

In response to the restriction requirement in the action dated June 19, 2001, applicant elects Group I (claims 1-11 and 15-17).

Applicant thanks the examiner and her supervisor for the helpful telephone interview held on May 29, 2001.

Applicant's remarks, below, appear after related comments of the examiner in the action dated April 10, 2001, shown in small bold-faced type and not necessarily in the order originally presented by the examiner.

14. Claims 1, 8, 15-17, 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, it is confusing why a same position in a space is identified by two ways:

46